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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/709,532	11/13/2000	Michael J. Bowes	108339-09057	4435

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EXAMINER

MOORE JR, MICHAEL J

ART UNIT	PAPER NUMBER
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2666

DATE MAILED: 01/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/709,532

Applicant(s)

BOWES, MICHAEL J.

Examiner

Michael J Moore, Jr.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14-32 and 35-38 is/are allowed.
- 6) ☒ Claim(s) 1,2,6,10,13,33 and 34 is/are rejected.
- 7) ☒ Claim(s) 3-5,7-9,11 and 12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 November 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) *///*
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2-4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statements (IDS) received on 2/8/01, 9/6/01, and 11/7/01 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the examiner considered the information disclosure statements.

Specification

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

3. The disclosure is objected to because of the following informalities: On page 38, line 20, "Figure 38" should be "Figure 39" in order to correspond to the drawings. On page 60, line 29, the word "march" should be "match". On page 63, line 28, the word "programed" should be "programmed". On page 67, line 28, the word "se" should be "see". On page 68, line 12, the word "meterid" should be "meter id". On page 85, line 22, "SOC 20" should be "SOC 10" in order to correspond to the drawings. On page 102, line 22, "interface 271" should be "interface 261" in order to correspond to the drawings. On page 114, line 27, the word "Figured" should be "Figures". Appropriate correction is required.

Drawings

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the

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description: The steps 25-6, 25-7, and 25-8 that are mentioned in the specification are not labeled in Figure 25. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

5. The drawings are objected to because of the following informalities: In Figure 8, element 112 that is labeled "data pocket" should be "data packet". In Figure 28, element 94 that is labeled "fow control logic" should be "flow control logic". Lastly, labeling of the steps in Figures 48-51 was done in hand writing. It is suggested that the applicant provide a formal correction of these figures. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims **1, 2, 6, 10, 33, and 34** are rejected under 35 U.S.C. 103(a) as being unpatentable over reference "U" of the references cited page (PTO-892) in view of Ramelson et al. (U.S. 5,781,745).

Regarding claim 1, reference "U" discloses a data flow control method involving the transmission of packet request messages and packet acknowledgement messages between a sender and receiver on lines 6-9. Reference "U" discloses on line 12 how

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each request and acknowledgement message has a "correlator" field (control bit string) and a "parity" bit. Also, reference "U" discloses a method of packet request and acknowledgement validation by making adjustments to the "correlator" field and "parity" bit in order to check for lost messages on lines 9-17. Reference "U" does not disclose how each request and acknowledgement message has an identification bit string.

However, Ramelson et al. discloses a 64-bit packet in Figure 5 that contains a 6-bit source port ID field that constitutes an identification bit string. At the time of the invention, it would have been obvious to someone of ordinary skill in the art given these references to use an identification field as in Figure 5 of Ramelson et al. along with the control field and parity field of reference "U". A motivation for doing so would be to provide a way to identify the source and/or destination of a particular packet.

Regarding claim 2, reference "U" discloses that the generated packet request message includes a "correlator" field (request control code group) on line 12. Reference "U" does not disclose that the generated packet request message includes a request data code group. However, Ramelson et al. discloses the format of an Ethernet packet in Figure 7 that contains a 64-1518-byte payload field that constitutes a request data code group. At the time of the invention, it would have been obvious to someone of ordinary skill in the art given these references to combine a control code group as in reference "U" with a data code group as in Figure 7 of Ramelson et al. within a packet request message. A motivation for doing so would be in order to be able to send data along with some control information for that data.

Regarding claim 6, reference "U" discloses that the generated request acknowledge message includes a "correlator" field (acknowledge control code group) on line 12. Reference "U" does not disclose that the generated request acknowledge message includes an acknowledge data code group. However, Ramelson et al. discloses the format of an Ethernet packet in Figure 7 that contains a 64-1518-byte payload field that constitutes an acknowledge data code group. At the time of the invention, it would have been obvious to someone of ordinary skill in the art given these references to combine a control code group as in reference "U" with a data code group as in Figure 7 of Ramelson et al. within a request acknowledge message. A motivation for doing so would be in order to be able to send data along with some control information for that data.

Regarding claim 10, reference "U" further discloses the determination of validity of a "correlator" field (request control code group message) and a "parity" bit by making adjustments to these fields in order to check for lost messages as stated on lines 9-17.

Regarding claim 33, reference "U" does not disclose the transmittal of a packet request ordered set. However, Ramelson et al. discloses an Ethernet packet in Figure 7 with an 8-byte header and a 64-1518-byte payload. This combination constitutes a set of information bytes in a particular order. At the time of the invention, it would have been obvious to someone of ordinary skill in the art given these references to transmit an ordered set as in Figure 7 of Ramelson et al. using the method of claim 1. A motivation for doing so would be in order to have the organization of data in a specific order so that the data is useful.

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Regarding claim **34**, reference "U" does not disclose the transmittal of a request acknowledgement ordered set. However, Ramelson et al. discloses an Ethernet packet in Figure 7 with an 8-byte header and a 64-1518-byte payload. This combination constitutes a set of information bytes in a particular order. At the time of the invention, it would have been obvious to someone of ordinary skill in the art given these references to transmit an ordered set as in Figure 7 of Ramelson et al. using the method of claim **1**. A motivation for doing so would be in order to have the organization of data in a specific order so that the data is useful.

8. Claim **13** is rejected under 35 U.S.C. 103(a) as being unpatentable over reference "U" of the references cited page (PTO-892) in view of Ramelson et al. (U.S. 5,781,745) and in further view of Meyer et al. (U.S. 6,611,495).

Reference "U" in view of Ramelson et al. discloses claim **1** as described above. Reference "U" in view of Ramelson et al. does not disclose the starting of a timer upon transmission of a packet request message and retransmitting the message if a predetermined period of time has passed. However, Meyer et al. discloses a retransmission timer (REXMT) in column 2, lines 41-56 that times packet transmission according to a predetermined time period. At the time of the invention, it would have been obvious to someone of ordinary skill in the art given these references to combine the method of claim **1** with a retransmission timer as described in the Meyer et al. reference. A motivation for doing so would be in order to have an effective transmission error recovery procedure as stated in column 2, lines 41-56 of the Meyer et al. reference.

Allowable Subject Matter

9. Claims **14-32 and 35-38** are allowed.

10. The following is an examiner's statement of reasons for allowance:

Regarding claim **14**, the prior art teaches a data flow control method across a high speed link by transmitting a packet request message from a first station to a second station where this message has a first identification number, a first control code group, and a first parity parameter. The prior art also teaches the transmission of a request acknowledgement message from the second station to the first station where this message has a second identification number, a second control group, and a second parity parameter. The prior art also teaches the determination of the validity of first and second control groups as well as first and second parity parameters. The prior art fails to teach the storing of the first identification number as well as the determination of whether the second identification number matches the first identification number.

Regarding claims **15-27, 35, and 36**, these claims are further limiting to claim **14** and therefore are also not taught by the prior art.

Regarding claim **28**, the prior art teaches an apparatus for data flow control that has a first transmitting unit for transmitting a packet request message from a first station to a second station where this message has a first identification number, a first control code group, and a first parity parameter. The prior art also teaches a second transmitting unit for transmitting a request acknowledgment message from the second station to the first station where this message has a second identification number, a second control code group, and a second parity parameter. The prior art fails to teach a

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storage unit for storing the first identification number associated with the packet request message. The prior art also fails to teach a flow logic unit for determining the validity of the first and second control groups as well as the first and second parity parameters. The prior art also fails to teach the determination of whether the second identification number matches the first identification number.

Regarding claims **29-32, 37, and 38**, these claims are further limiting to claim **28** and therefore are also not taught by the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

11. Claims **3-5, 7-9, 11, and 12** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Gregg et al. (US 2001/0030943), Keen et al. (U.S. 6,457,146), Desnoyers et al. (U.S. 6,337,852), Frink et al. (US 2003/0133448), Lu et al. (U.S. 6,104,749), Banks (U.S. 6,263,001), and Subbiah et al. (U.S. 6,289,016) are all references that contain material pertinent to this application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Moore, Jr. whose telephone number is (703)

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305-8703. The examiner can normally be reached during the hours of 8:30am - 5:00pm (Monday-Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao can be reached at (703) 308-5463. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

mjm MM



DANG TON
PRIMARY EXAMINER